

JAPANESE PATENT OFFICE  
PATENT JOURNAL  
KOKAI PATENT APPLICATION NO. HEI 6[1994]-188280

Technical Disclosure Section

Int. Cl. <sup>5</sup> :	H 01 L 21/60 23/28 23/50 H 01 L 25/05 H 01 L 23/50 25/065 25/07 25/18
Sequence Nos. for Office Use:	B 6918-4M Q 6918-4M Z 8617-4M W 9272-4M F 9272-4M G 9272-4M
Application No.:	Hei 4[1992]-340111
Application Date:	December 21, 1992
Publication Date:	July 8, 1994
No. of Claims:	3 (Total of 4 pages)
Examination Request:	Not requested

SEMICONDUCTOR DEVICE

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[There are no amendments to this patent.]

#### Abstract

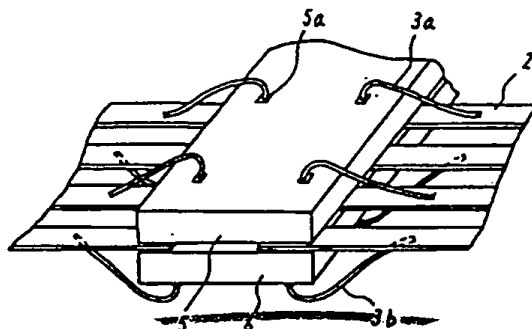
##### Objective

To improve the capacity, such as the memory capacity, without lowering the mounting area efficiency.

##### Constitution

It is equipped with a lead frame for a semiconductor device, in which the tips of several lead frames 2 are arranged to face each other, as well as first and second semiconductor chips 5 and 6, which are arranged on the surface and the back face of the

tips of the above-mentioned lead frames 2 and are electrically connected with the above-mentioned lead frames 2 by fine metal wires 3a and 3b. The above-mentioned first and second semiconductor chips 5 and 6 are sealed with a resin along with the tips of the above-mentioned lead frames 2.



Key: 2      Lead frame  
 3a      Metal wire  
 3b      Metal wire  
 5      Semiconductor chip  
 5a      Electrode  
 5b      Protruding electrode  
 6      Semiconductor chip  
 6a      Electrode  
 6b      Protruding electrode

#### Claims

1. A semiconductor device characterized by the fact that it is equipped with a lead frame for a semiconductor device, in which the tips of several lead frames are arranged to face each other, as well as first and second semiconductor chips, which are

arranged on the surface and the back face of the tips of the above-mentioned lead frames and are electrically connected with the above-mentioned lead frames by fine metal wires; and characterized in that the above-mentioned first and second semiconductor chips are sealed with a resin along with the tips of the above-mentioned lead frames.

2. A semiconductor device characterized by the fact that it is equipped with a lead frame for a semiconductor device, in which the tips of several lead frames are arranged to face each other, as well as first and second semiconductor chips, which are arranged on the surface and the back face of the tips of the above-mentioned lead frames and having electrodes on the surfaces opposite to the above-mentioned lead frames; that protruded electrodes are formed at one of the above-mentioned lead frames and the above-mentioned electrodes; and that the above-mentioned lead frames and the above-mentioned electrodes are connected via the protruded electrodes; that the above-mentioned first and second semiconductor chips are sealed with a resin along with the tips of the above-mentioned lead frames.

3. A semiconductor device characterized by the fact that it is equipped with a lead frame for a semiconductor device, in which the tips of several lead frames are arranged to face each other, as well as first and second semiconductor chips, which are arranged on the surface and the back face of the tips of the above-mentioned lead frames and having electrodes on the surfaces opposite to the above-mentioned lead frames; that protruded electrodes are formed at one of the above-mentioned lead frames and the above-mentioned electrodes; and that the above-mentioned lead frames and the above-mentioned electrodes are connected via the protruded electrodes; that the above-mentioned first and

second semiconductor chips are sealed with a resin along with the tips of the above-mentioned lead frames so that the back surfaces are exposed.

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